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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,600	09/18/2003	Robert J. Nealon	LUC-421/Nealon 2	8545

32205 7590 03/15/2011

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EXAMINER	
ROBERTS, BRIAN S	
ART UNIT	PAPER NUMBER
2466	
MAIL DATE	DELIVERY MODE
03/15/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/666,600	NEALON, ROBERT J.	
	Examiner	Art Unit	
	BRIAN ROBERTS	2466	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 December 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *12* is/are allowed.

6)☒ Claim(s) *1-11,13 and 14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

- Claims 1-14 remain pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 and 13-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- In reference to claim 1

The limitations "allocating… channels;" in lines 8-9, the "establishing… PVCs;" in lines 13-14, and "wherein a single packet switch control… is uneven" in lines 15-19 were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 contains steps from two separate embodiments that were described in the specification. The "providing" step in line 4 and the "switching" step in line 10 and the "transcoding" step in line 11 pertain to a first method described in Figure 2 and page 7 lines 1-8 of the specification. The "allocating" step in line 8, the "establishing" step in line 13, and the "wherein a single packet switch

control" of lines 15-19 pertain to a second method described in Figure 3 and page 7 lines 9-16 of the specification. Since the original disclosure fails to describe an method comprising the steps of the first method and second as recited in claim 1, the newly added limitations "allocating… channels;" in lines 8-9, the "establishing… PVCs;" in lines 13-14, and "wherein a single packet switch control… is uneven" in lines 15-19 constitute new matter.

- In reference to claim 4

The limitations "establishing… transcoder." in lines 13-24 were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 4 contains steps from two separate embodiments that were described in the specification. The "terminating" step in line 3, the "setting up" step in line 5, the "allocating" step in line 7, and the "instructing" step in line 9 pertain to a first method described in Figure 5 and page 8 lines 1-10 of the specification. The "establishing" step in line 13, and the "effecting" step in line 18 pertain to a second method described in Figure 3 and page 7 lines 9-16 of the specification. Furthermore, the specification did not describe the first method including the "switching" step in line 22 or the "terminating" step in line 23. Since the original disclosure fails to describe a method as recited in claim 4, the newly added limitations "establishing… transcoder." in lines 13-24 constitute new matter.

- In reference to claim 7

The limitations "allocating… channels;" in lines 9-10, and "establishing… PVCs;" in lines 15-16 were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 7 contains steps from two separate embodiments that were described in the specification. The "providing" step in line 6, the "switching" step in line 11, and the "transcoding" step in line 13 pertain to a first method described in Figure 4 and page 7 lines 17-24 of the specification. The "allocating" step in line 9 and the "establishing" step in line 15 pertain to a second method described in Figure 3 and page 7 lines 9-16 of the specification. Since the original disclosure fails to describe a third method comprising the steps of the first method and second as recited in claim 7, the newly added limitations "allocating… channels;" in lines 9-10, and "establishing… PVCs;" constitute new matter.

- In reference to claim 10

The limitations "switching… transcoder." in lines 11-15 were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 10 the "allocating" step in line 3 and the "transcoding" step in line 6 pertain to the method described in Figure 3 and page 7 lines 9-16 of the specification. The original disclosure, however, fails to describe the method in Figure 3 and page 7 lines 9-16 of the specification including the steps of "switching" step as recited in line

11, the "switching" step as recited in 13, and the "terminating" step as recited in line 14. Consequently, the limitations "switching… transcoder." in lines 11-15 constitute new matter.

- In reference to claim 13

The limitations "allocating… channels;" in lines 6-7, and "using… PVCs;" in lines 10-11 were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 13 contains steps from two separate embodiments that were described in the specification. The "providing" step in line 3, the "switching" step in line 8, and the "transcoding" step in line 12 pertain to a first embodiment described in Figure 4 and page 7 lines 17-24 of the specification. The "allocating" step in line 6 and the "using" step in line 10 pertain to a second method described in Figure 3 and page 7 lines 9-16 of the specification. Since the original disclosure fails to describe a third method comprising the steps of the first method and second as recited in claim 13, the newly added limitations "allocating… channels;" in lines 6-7, and "using… PVCs;" in lines 10-11 constitute new matter.

- In reference to claims 2-3, 5-6, 8-9, 11, and 14

Claims 2-3, 5-6, 8-9, 11, and 14 are rejected because they depend on a rejected parent claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 and 13-14, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Paajanen et al. (US 7349404) in view of Jarl (US 2003/0026262) in view of Yoshihiro et al. (US 5239539) in view of Toyama et al. (US 6597696).

- In reference to claim 1-2, as best understood

In Figures 1, Paajanen et al. teaches a method for using ATM AAL2 switching within a wireless access gateway that includes providing AAL2 CID switching (col. 1 lines 34-36) in a wireless access gateway, the wireless access gateway having a plurality of transcoders **3**, the plurality of transcoders **3** having a subset of transcoders that are available transcoders (col. 5 lines 27-39); allocating individual CIDs (col. 1 lines 34-36) to transcoder channels (*individual call connections between AAL2s and DSPs*) on an as needed basis without a fixed relationship between external PVCs and transcoder channels (*there is inherently not a fixed relationship between external PVCs and the transcoder channels because the transcoder channels are setup dynamically between the AAL2s and DSPs*; (column 5 lines 27-62); switching a call to any one respective transcoder **3** of available transcoders (col. 4 lines 37-43); a Resource Manager and AAL2 connection control is operatively connected to the external PVCs

and the transcoders **3** for allocating the individual CIDs to the transcoder channels on an as needed basis. (column 5 lines 27-62)

Paajanen et al. does not teach the Resource Manager and AAL2 connection control being located in a single packet switch control wherein the single packet switch control effects switching of individual packets from the external PVCs and to internal PVCs.

Jarl teaches a single packet switch control **210** that effects switching of individual packets from an external VPI/VPC connection and to an internal VPI/VPC connection that is mapped to one of a group of compression/decompression units **220**. (paragraph 0021)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of Paajanen et al. to include the Resource Manager and AAL2 connection control being located in a single packet switch control wherein the single packet switch control effects switching of individual packets from the external PVCs and to internal PVCs as suggested by Jarl because it provides a central controller to assign the CIDs to the individual DSP channels and control switching to the DSPs.

The combination of Paajanen et al. and Jarl does not teach the single packet switch control establishing an even distribution of calls among the transcoders for an uneven call load on the external PVCs.

In Figure 3B, Yoshihiro teaches a main processor **3** that controls the assignment of call processing to call processors **2-1** through **2-N** based on the state of the call

processors so that the loads are distributed uniformly among the call processors. (col. 4 lines 34-68)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the single packet switch control of the combination of Paajanen et al. and Jarl to include establishing an even distribution of calls among the transcoders for an uneven call load on the external PVCs as suggested by Yoshihiro because it prevents a particular DSP from becoming overloaded or under-utilized.

The combination of Paajanen et al., Jarl, and Yoshihiro does not teach transcoding the call from a first format to a second format in the DSPs.

Toyama et al. teaches upper layer processing section **122-1** to **121-M** that may process a CPS-packet payload by converting of the encoding system for a voice signal, which is loaded on the CPS-packet, encryption and decryption, compression and extension, protocol conversion, and media conversion. (col. 11 line 62 - col. 12 line 9)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Paajanen et al., Jarl, and Yoshihiro of to include transcoding the call from a first format to a second format in the DSPs as suggested by Toyama et al. because it allows a voice call payload to be processed at an upper layer, and converted to a second format that is required by an endpoint.

- In reference to claim 3

The combination of Paajanen et al., Jarl, Yoshihiro, and Toyama et al. teaches a system and method that covers substantially all limitations of the parent claim. In

Figures 1, Paajanen et al. further teaches the switching of the call to any one respective transcoder **3** of available transcoders is on an as needed basis. (column 5 lines 27-54)

- In reference to claim 4, 6

In Figure 1, Paajanen et al. teaches a method for using ATM AAL2 switching within a wireless access gateway that includes: terminating a plurality of external AAL2 PVCs at an intermediate node **1**; setting up a set of internal AAL2 PVCs between the intermediate node **1** and a set of transcoders **3** that form a plurality of DSP channels; allocating a respective DSP channel (*individual call connections between AAL2s and DSPs*), of the plurality of DSP channels for a call as a function of at least one predetermined parameter; switching individual AAL TYPE 2 CPS-packets (col. 1 lines 34-36) of a new call at a AAL2 CPS layer from an external AAL2 PVC of the plurality of external AAL2 PVCs to an internal AAL2 PVC of the set of internal AAL2 PVCs on an as needed basis wherein a Resource Manager and AAL2 connection control is operatively connected to the external PVCs and the transcoders **3** for allocating the individual CIDs to the DSP channels on an as needed basis. (column 5 lines 27-62)

Paajanen et al. does not teach the Resource Manager and AAL2 connection control being located in a single packet switch control that is operatively connection to the intermediate node, the PVCs and the transcoder, wherein the single packet switch control effects switching of individual packets from the external PVCs and to internal PVCs by instructing the intermediate node.

Jarl teaches a single packet switch control **210** that effects switching of individual packets from an external VPI/VPC connection and to an internal VPI/VPC connection that is mapped to one of a group of compression/decompression units **220**. (paragraph 0021)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of Paajanen et al. to include the Resource Manager and AAL2 connection control being located in a single packet switch control that is operatively connected to the intermediate node, the AAL2 PVCs and the transcoder wherein the single packet switch control effects switching of individual packets from the external PVCs and to internal PVCs by instructing the intermediate node as suggested by Jarl because it provides a central controller to assign the CIDs to the individual DSP channels and control switching to the DSPs.

The combination of Paajanen et al. and Jarl does not teach the single packet switch control establishing an even distribution of calls among the transcoders for an uneven call load on the external PVCs.

In Figure 3B, Yoshihiro teaches a main processor **3** that controls the assignment of call processing to call processors **2-1** through **2-N** based on the state of the call processors so that the loads are distributed uniformly among the call processors. (col. 4 lines 34-68)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the single packet switch control of the combination of Paajanen et al. and Jarl to include establishing an even distribution of calls among the DSPs for

an uneven call load on the external PVCs as suggested by Yoshihiro because it prevents a particular DSP from becoming overloaded or under-utilized.

The combination of Paajanen et al., Jarl, and Yoshihiro does not teach the AAL2 SSCS layer is terminated on a per call basis at a respective DSP.

Toyama et al. teaches upper layer processing section **122-1** to **121-M** that may process a CPS-packet payload by converting of the encoding system for a voice signal, which is loaded on the CPS-packet, encryption and decryption, compression and extension, protocol conversion, and media conversion. (col. 11 line 62 - col. 12 line 9) As such, the AAL2 SSCS layer may be terminated.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Paajanen et al., Jarl, and Yoshihiro of to include the AAL2 SSCS layer being terminated on a per call basis at a respective DSP as suggested by Toyama et al. because it allows a voice call payload to be processed at an upper layer, and converted to a second format that is required by an endpoint.

- In reference to claim 5

The combination of Paajanen et al., Jarl, Yoshihiro, and Toyama et al. teaches a system and method that covers substantially all limitations of the parent claim. In Figures 1, Paajanen et al. further teaches wherein at least one predetermined parameter comprises at least one of a state of the transcoders **3**, a current load on the transcoders, and a state of the internal AAL2 PVCs. (column 5 lines 27-54)

- In reference to claim 7-8

In Figures 1, Paajanen et al. teaches a method for using ATM AAL2 switching within a wireless access gateway that includes providing AAL2 CID switching in a wireless access gateway, the wireless access gateway having a plurality of DSPs **3**; allocating individual CIDs (col. 1 lines 34-36) to transcoder channels (*individual call connections between AAL2s and DSPs*) on an as needed basis without a fixed relationship between external PVCs and transcoder channels (*there is inherently not a fixed relationship between external PVCs and the transcoder channels because the transcoder channels are setup dynamically between the AAL2s and DSPs*; (column 5 lines 27-62); switching individual AAL TYPE 2 CPS-packets (col. 1 lines 34-36) of a call at a AAL2 CPS layer to any one respective DSP **3** of available DSPs, the available DSPs being a subset of the plurality of DSPs **3**; (column 4 lines 5-36; column 5 lines 27-54); a Resource Manager and AAL2 connection control is operatively connected to the external PVCs and the DSPs **3** for allocating the individual CIDs to the transcoder channels on an as needed basis. (column 5 lines 27-62)

Paajanen et al. does not teach the Resource Manager and AAL2 connection control being located in a single packet switch control wherein the single packet switch control effects switching of individual packets from the external PVCs and to internal PVCs.

Jarl teaches a single packet switch control **210** that effects switching of individual packets from an external VPI/VPC connection and to an internal VPI/VPC connection

that is mapped to one of a group of compression/decompression units **220**. (paragraph 0021)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of Paajanen et al. to include the Resource Manager and AAL2 connection control being located in a single packet switch control wherein the single packet switch control effects switching of individual packets from the external PVCs and to internal PVCs as suggested by Jarl because it provides a central controller to assign the CIDs to the individual DSP channels and control switching to the DSPs.

The combination of Paajanen et al. and Jarl does not teach the single packet switch control establishing an even distribution of calls among the transcoders for an uneven call load on the external PVCs.

In Figure 3B, Yoshihiro teaches a main processor 3 that controls the assignment of call processing to call processors **2-1** through **2-N** based on the state of the call processors so that the loads are distributed uniformly among the call processors. (col. 4 lines 34-68)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the single packet switch control of the combination of Paajanen et al. and Jarl to include establishing an even distribution of calls among the transcoders for an uneven call load on the external PVCs as suggested by Yoshihiro because it prevents a particular DSP from becoming overloaded or under-utilized.

The combination of Paajanen et al., Jarl, and Yoshihiro does not teach the DSPs acting as transcoders for digital representation of speech, transcoding the packets of the call in the respective DSP from a first encoding to a second encoding, and the AAL2 SSCS layer being terminated on a per call basis at a respective DSP.

Toyama et al. teaches upper layer processing section **122-1** to **121-M** that may process a CPS-packet payload by converting of the encoding system for a voice signal, which is loaded on the CPS-packet, encryption and decryption, compression and extension, protocol conversion, and media conversion. (col. 11 line 62 - col. 12 line 9) As such, the AAL2 SSCS layer may be terminated.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Paajanen et al., Jarl, and Yoshihiro of to include the DSPs acting as transcoders for digital representation of speech, transcoding the packets of the call in the respective DSP from a first encoding to a second encoding, and the AAL2 SSCS layer being terminated on a per call basis at a respective DSP as suggested by Toyama et al. because it allows a voice call payload to be processed at an upper layer, and converted to a second format that is required by an endpoint.

- In reference to claim 9

The combination of Paajanen et al., Jarl, Yoshihiro, and Toyama et al. teaches a system and method that covers substantially all limitations of the parent claim. In Figures 1, Paajanen et al. further teaches wherein the switching of individual calls to

any one respective DSP (3) of available DSPs (3) is on an as needed basis. (column 5 lines 27-54)

- In reference to claim 10

In Figures 1, Paajanen et al. teaches a method for using ATM AAL2 switching within a wireless access gateway that includes allocating individual CIDs (col. 1 lines 34-36) to transcoder channels (*individual call connections between AAL2s and DSPs*) on an as needed basis without a fixed relationship between external PVCs and transcoder channels (*there is inherently not a fixed relationship between external PVCs and the transcoder channels because the transcoder channels are setup dynamically between the AAL2s and DSPs*; (column 5 lines 27-62) switching individual AAL TYPE 2 CPS-packets (col. 1 lines 34-36) of a call at a AAL2 CPS layer to any one respective transcoder **3** of available transcoders, the available transcoders being a subset of the plurality of transcoders **3**; (column 4 lines 5-36; column 5 lines 27-54 wherein a Resource Manager and AAL2 connection control is operatively connected to the external PVCs and the transcoders **3** for allocating the individual CIDs to the transcoder channels on an as needed basis. (column 5 lines 27-62)

Paajanen et al. does not teach the Resource Manager and AAL2 connection control being located in a single packet switch control wherein the single packet switch control effects the switching of the individual AAL TYPE 2 CPS-packets from the external PVCs and to internal PVCs.

Jarl teaches a single packet switch control **210** that effects switching of individual packets from an external VPI/VPC connection and to an internal VPI/VPC connection that is mapped to one of a group of compression/decompression units **220**. (paragraph 0021)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of Paajanen et al. to include the Resource Manager and AAL2 connection control being located in a single packet switch control wherein the single packet switch control effects the switching of the individual AAL TYPE 2 CPS-packets from the external PVCs and to internal PVCs as suggested by Jarl because it provides a central controller to assign the CIDs to the individual DSP channels and control switching to the DSPs.

The combination of Paajanen et al. and Jarl does not teach the single packet switch control establishing an even distribution of calls among the transcoders for an uneven call load on the external PVCs.

In Figure 3B, Yoshihiro teaches a main processor **3** that controls the assignment of call processing to call processors **2-1** through **2-N** based on the state of the call processors so that the loads are distributed uniformly among the call processors. (col. 4 lines 34-68)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the single packet switch control of the combination of Paajanen et al. and Jarl to include establishing an even distribution of calls among the transcoders

for an uneven call load on the external PVCs as suggested by Yoshihiro because it prevents a particular DSP from becoming overloaded or under-utilized.

The combination of Paajanen et al., Jarl, and Yoshihiro does not teach transcoding the call from a first format to a second format in the DSPs, and the AAL2 SSCS layer being terminated on a per call basis at a respective DSP.

Toyama et al. teaches upper layer processing section **122-1** to **121-M** that may process a CPS-packet payload by converting of the encoding system for a voice signal, which is loaded on the CPS-packet, encryption and decryption, compression and extension, protocol conversion, and media conversion. (col. 11 line 62 - col. 12 line 9) As such, the AAL2 SSCS layer may be terminated.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Paajanen et al., Jarl, and Yoshihiro of to include transcoding the call from a first format to a second format in the DSPs and the AAL2 SSCS layer being terminated on a per call basis at a respective DSP as suggested by Toyama et al. because it allows a voice call payload to be processed at an upper layer, and converted to a second format that is required by an endpoint.

- In reference to claim 11

The combination of Paajanen et al., Jarl, Yoshihiro, and Toyama et al. teaches a system and method that covers substantially all limitations of the parent claim. In Figures 1, Paajanen et al. further teaches wherein the allocating of individual CIDs to transcoder channels is a function of at least one predetermined parameter, and wherein

the at least one predetermined parameter comprises at least one of a state of the each of the transcoders **3**, and a current load on all of the transcoders **3**. (column 5 lines 27-54)

- In reference to claim 13-14

In Figures 1, Paajanen et al. teaches a method for using ATM AAL2 switching within a wireless access gateway that includes providing AAL2 CID switching in a wireless access gateway, the wireless access gateway having a plurality of DSPs **3**; allocating individual CIDs (col. 1 lines 34-36) to transcoder channels (*individual call connections between AAL2s and DSPs*) on an as needed basis without a fixed relationship between external PVCs and transcoder channels (*there is inherently not a fixed relationship between external PVCs and the transcoder channels because the transcoder channels are setup dynamically between the AAL2s and DSPs*; (column 5 lines 27-62); switching individual digital representations of speech in AAL TYPE 2 CPS-packets of a call to any one respective DSP **3** of available DSPs, the available DSPs being a subset of the plurality of DSPs **3**; (column 4 lines 5-36; column 5 lines 27-54) a Resource Manager and AAL2 connection control is operatively connected to the external PVCs and the transcoders **3** for allocating the individual CIDs to the transcoder channels on an as needed basis. (column 5 lines 27-62)

Paajanen et al. does not teach the Resource Manager and AAL2 connection control being located in a single packet switch control wherein the single packet switch

control effects switching of individual packets from the external PVCs and to internal PVCs.

Jarl teaches a single packet switch control **210** that effects switching of individual packets from an external VPI/VPC connection and to an internal VPI/VPC connection that is mapped to one of a group of compression/decompression units **220**. (paragraph 0021)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system and method of Paajanen et al. to include the Resource Manager and AAL2 connection control being located in a single packet switch control wherein the single packet switch control effects switching of individual packets from the external PVCs and to internal PVCs as suggested by Jarl because it provides a central controller to assign the CIDs to the individual DSP channels and control switching to the DSPs.

The combination of Paajanen et al. and Jarl does not teach the single packet switch control establishing an even distribution of calls among the transcoders for an uneven call load on the external PVCs.

In Figure 3B, Yoshihiro teaches a main processor 3 that controls the assignment of call processing to call processors **2-1** through **2-N** based on the state of the call processors so that the loads are distributed uniformly among the call processors. (col. 4 lines 34-68)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the single packet switch control of the combination of Paajanen

et al. and Jarl to include establishing an even distribution of calls among the transcoders for an uneven call load on the external PVCs as suggested by Yoshihiro because it prevents a particular DSP from becoming overloaded or under-utilized.

The combination of Paajanen et al., Jarl, and Yoshihiro does not teach the DSPs acting as transcoders for digital representations of speech, transcoding the digital representation of speech of the call in the respective DSP from a first encoding to a second encoding, and the AAL2 SSCS layer being terminated on a per call basis at a respective DSP.

Toyama et al. teaches upper layer processing section **122-1** to **121-M** that may process a CPS-packet payload by converting of the encoding system for a voice signal, which is loaded on the CPS-packet, encryption and decryption, compression and extension, protocol conversion, and media conversion. (col. 11 line 62 - col. 12 line 9) As such, the AAL2 SSCS layer may be terminated.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Paajanen et al., Jarl, and Yoshihiro of to include the DSPs acting as transcoders for digital representation of speech, transcoding the digital representations of speech of the call in the respective DSP from a first encoding to a second encoding, and the AAL2 SSCS layer being terminated on a per call basis at a respective DSP as suggested by Toyama et al. because it allows a voice call payload to be processed at an upper layer, and converted to a second format that is required by an endpoint.

Allowable Subject Matter

Claim 12 is allowed.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN ROBERTS whose telephone number is (571)272-3095. The examiner can normally be reached on M-F 10:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DANIEL RYMAN can be reached on (571) 272-3152. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Brian Roberts/
Examiner, Art Unit 2466
03/12/2011